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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/262,628 03/04/99 HORN

J 52075USA5A

EXAMINER

IM22/0418

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ART UNIT

PAPER NUMBER

1713

9

DATE MAILED:

04/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/262,628

Applicant(s)

Horn et al.

Examiner

Fred Zitomer

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Feb 6, 2001

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above, claim(s) 5, 6, 9, 11, and 24-27 is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-4, 7, 8, 10, and 12-23 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 & 6

20) ☐ Other:

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1.

This responds to the communication of Feb 6, 2001. Applicant's election without traverse of ethylene/chlorotrifluoroethylene copolymer as the elected species in Paper No. 8 is acknowledged. Contrary to applicant's's assertion claims 1-4,7,8,10 and 12-23 read on the elected species and are being examined at this time.

2.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4,7,8,10 and 12-23 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for specified fluoropolymers and amounts thereof, does not reasonably provide enablement for the multiplicity of polymers and amounts thereof within the claims. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Claims 1 and 12 for example read on any orthodontic article containing any amount of any fluoropolymer. The possible combinations are unlimited. For example an article made of an acrylic polymer containing 1 ppm of a cyclic polyfluorocarbon is within the claims. Claim 17 is slightly less broad but still encompasses a limitless number of polymers containing a mere trace of the instant fluoropolymers.

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3.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,7,8,10 and 12-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammar et al., US 5,461,133, taken with Pustka, US 4,323,956.

Hammar teaches using the present fluoropolymers in orthodontic articles because of their physical properties, stain resistance and aesthetics [column 5, line 58 - column 6, line 37]. Pustka teaches the suitability of said polymers in light fixtures because of their good physical and optical qualities [column 4, line 32 - column 5, line 42]. The polymers exhibit good transmittance qualities over the entire visible spectrum [column 4, lines 49-51], i.e. from about 400 to 800 nm. Neither reference teaches the specific transmittance and color shift values now being claimed. It would have been obvious to prepare orthodontic articles of the instant fluoropolymers in the expectation of realizing the transmittance and color shift values herein because the polymers, their suitability for orthodontic articles and their advantageous optical properties over the entire visible spectrum were known at the time of the instant invention. Further, it is deemed pertinent that all of the instant fluoropolymers are chemicals of commerce used as received absent a showing on this record of treatment by applicant which would enhance transmittance or color shift.

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Accordingly, all optical properties of articles prepared from the fluoropolymers are deemed inherent and not to impact patentability.

4.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hammar et al., US 5,461,133.

Hammar teaches orthodontic articles comprising the present fluoropolymers as stated above. The disclosures of Hammar are commensurate with the instant invention.

5.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wittman et al., US 3,504,438, teach the advantageous physical properties of orthodontic articles comprising the instant fluoropolymers [column 3, lines 32-59]. The disclosures are commensurate with instant claim 17.

Lee, US 5,994,028, teaches the good light transmittance of the instant fluoropolymers.

6.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to

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Fred Zitomer whose telephone number is (703) 308-2461. The examiner can normally be reached Monday through Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful David Wu can be reached at (703) 308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



FRED ZITOMER, PhD
PRIMARY EXAMINER
ART UNIT 1713

Zitomer/fz
April 15, 2001